



AI-Based Power System Stability and Control Analysis

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Message from the Guest Editors

Dear Colleagues,

This Special Issue will focus on how AI can be leveraged for power system stability analysis and control, which is especially challenging due to the increasing penetration of converter-interfaced generations (CIG) in modern power systems. AI with real-world data and cutting-edge techniques will be discussed. This Special Issue will present new promising research directions in power system stability analysis and control and will disseminate and discuss research on AI. Topics of interest include, but are not limited to, the following:

- Hybrid augmented intelligence for AI in power system stability analysis and control;
- Interpretable AI in power system stability analysis and control;
- Casual inference in power system stability analysis and control;
- Observability and controllability assessment of AI-based power system stability analysis and control;
- Benchmark dataset creation requirements for power system stability analysis;
- AI in measurements-based online stability assessment and emergency control;
- AI in multiple time-scale system dynamics dominated by CIGs;
- AI in non-linear and complex system dynamics.

You are welcome to contribute!!!





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Editor-in-Chief

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Message from the Editor-in-Chief

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